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Motivating Students with
Learning Disabilities to Succeed in Education

Ana C. Reyes-Ortiz

A Capstone project for the Bachelor of Arts in Human Development and Family Studies

Motivating Students with Learning Disabilities to Succeed in Education

Introduction

Many students with learning disabilities may feel incapable of achieving in their academic goals and are in need of greater motivation. They may believe that abilities are innate and fixed and that their ability to learn and achieve is unchangeable. However, they may not be aware of growth mindset strategies that can support their academic success. To address the need for motivation, I created three lessons to teach seventh grade students in a resource classroom at Aptos Jr. High strategies for a growth mindset and to stay motivated throughout their academic challenges.

Need Statement

Too many students are in need of motivation to succeed in education. Baldes et al. (2000) and Sozer (2013) both emphasized the importance of motivation for students' academic success. Lack of motivation is detrimental for student academic achievement resulting in students paying less attention to activities, having lower grades, and presenting negative behaviors towards their classes (Selçuk and Güner, 2000 as cited in Sozer, 2013). Motivation is crucial for students to experience in order to overcome academic challenges and develop aspirational attitudes and mindsets about their education.

Acknowledging that motivation is crucial for all students to achieve in education, Bruhn et al. (2017) noted that motivation is the student's internal drive to achieve. Although motivation plays an important role in academic success for all students, students with a learning disability are more vulnerable to lack of motivation throughout their education. Lack of motivation and attention problems are likely to interfere with students with learning disabilities' learning effort

(Swanson & Hoskyn, 2001 as cited in Berkeley and Larsen, 2018). Consequently, students with learning disabilities face greater barriers in academic achievement and quality adult outcomes than their peers without disabilities (Johnson, 2007 as cited in Zheng et al., 2014). For example, every year 30% to 40% of students with a learning disability dropout of high school (Hoy et al., 1997 as cited in Rasheed, 2008). Therefore, it may be necessary to stress the importance of motivation for students with a learning disability to overcome their academic challenges.

Academic achievement derives from a growth mindset and motivation. Snipes et al. (2017) defines a growth mindset as one believing in oneself that intelligence can improve with the application of effort and learning. On the other hand, Hochanadel and Finamore (2015) defined a student with a fixed mindset as one who believes they have a permanent capacity and cannot change their intelligence and, thus, implement less effort to succeed. Cavanagh (2018) discussed that there is an empirical link between growth mindset and academic motivation. Haimovitz and Dweck (2017) also supported the idea that a growth mindset is an important factor for academic success, especially for students who face challenges. Growth mindset and motivation supports student academic achievement, but also may benefit students with a learning disability who face academic challenges.

Given that students with a learning disability are more vulnerable to a lack of motivation, students between the ages of eleven and fourteen years-old are even more vulnerable due to the critical development period marked by declines of academic motivation (Fakhouri et al., 2014, as cited in Gatz and Kelly, 2018). The developmental period is seen as critical because the frontal and prefrontal cortex of the human brain, are still developing throughout adolescence, there are rapid neurological and hormonal changes catalyzing newfound capacities for rational thought,

emotional mastery, and self-reflection in adolescence (Busso, 2014). Poon (2018) explains how adolescence, is in fact, a sensitive period of the executive function development for adolescence that can impact their academic performance, motivation, and behavior. Additionally, students with a learning disability tend to have negative beliefs about themselves, and why a growth mindset may be beneficial for students to support the practice of effort and improvement of their own abilities. This highlights the critical development period in adolescence between the ages of eleven and fourteen with a learning disability.

Development Application

It is known that adolescents' development of executive function is not fully developed until early adulthood. The executive function part of the brain includes the development of logic, critical analysis, planning, organization, emotion, motivation, cognitive abilities, and decision making (Poon, 2018). Along with these important brain and reasoning changes, adolescence is also a period of heightened risk-taking behaviors that may disrupt students' academics. Junior high school students with learning disabilities are already in a vulnerable position having to face academic challenges that may reduce their academic motivation as well as typical adolescent changes. Because students may not be aware of how to motivate themselves, they may benefit from growth mindset strategies to apply in their academics for greater motivation.

Furthermore, there is sufficient literature stating that the two different mindsets, fixed mindset and growth mindset, does, in fact, influence learning and leads students toward different goals. In addition, sustaining a growth mindset leads to better academic performance, especially for students who face challenges (Haimovitz and Dweck, 2017). Knowing that students' motivation is linked to academic success, students with a learning disability benefit from

learning how to develop growth mindset strategies to help them stay motivated through academic challenges. A learning disability coupled with the expected adolescent brain changes are two critical factors playing an important role in adolescents' academic motivation and success. With this said, I am creating three lessons to support adolescents' academic motivation by teaching them about growth mindset and growth mindset strategies.

Consideration of Diversity

My project will be conducted at Aptos Junior High School in a 7th grade Resource class during Directed Studies. Based on the 2017-2018 School Year SARC Report, there is only one 6th grade student, 343 7th grade students, and 318 8th grade students totaling 662 students enrolled at Aptos Junior High School. From the 662 students enrolled at Aptos Jr. High, 1.5% are Black or African American, 0.3% are American Indian or Alaska Native, 2.4% are Asian, 1.1% are Filipino, 41.2% are Hispanic or Latino, 0.5% Native Hawaiian or Pacific Islander, 52.6% White, 43.4% are Socioeconomically Disadvantaged, 11.3% are English Learners, 12.4% are Students with Disabilities, and 0.6% are Foster Youth. I anticipate that my participants will reflect the ethnic diversity of the school. Although only 12.4% of the students in the school have a disability, because the classroom in which I will be conducting my project is a Resource Room, all the participants will have an IEP, indicating a need for accommodations due to a learning disability. Resource classrooms are designed to support students with a learning disability, and it is possible that the students may not grasp some abstract ideas that I am presenting or think in abstract ways that will be necessary in the project since all students in the classroom need additional support for learning. Another issue to the diversity of participants is that because at least 10% of the student population are English Learners, I would expect that not all students are

proficient in English making the vocabulary usage in the lesson challenging for students. As a result, It is possible that students have not yet gained sufficient knowledge of how crucial motivation is for academic success.

Learning Outcomes

My project will focus on motivating students with learning disabilities and teaching them to apply growth mindset strategies to succeed in their education for a group of seventh grade students in a Resource classroom at Aptos Jr. High School in Aptos, California..

By the end of the project, participants will:

1. Recognize fixed and growth mindset
2. Transform typical fixed mindset statements that students use into growth mindset statements
3. Develop an academic goal using a growth mindset strategy

Method

Day 1: I began by informing the students the reason why I was going to teach the class. Because I work with this group of students daily, it was not necessary to introduce myself. I began by asking students what they thought about the terms: fixed mindset and growth mindset. I wrote students' ideas under the fixed mindset and growth mindset T-chart on the whiteboard. I then passed out the Mindset Reading Worksheet (See Appendix A) and asked volunteers to read out loud while the rest of the class followed. On the same worksheet, students compared and analyzed the different mindsets from "Two Mindset" diagram on the Mindset Reading Worksheet. After reading the Mindset Reading Worksheet, I went back to the ideas written on the T-chart and circled the thoughts most related to the definition of a fixed mindset and a

growth mindset. Lastly, students completed the “Is it fixed or Is it Growth?” worksheet to apply their new knowledge and define statements as fixed or growth based on their new knowledge of the two terms. See Appendix B.

Day 2: I asked students to voluntarily define fixed and growth mindsets from the previous lesson. I created a Fixed and Growth T-chart on the whiteboard again. I informed students that it was going to be a transformation day, meaning that they would be transforming a fixed statement into a growth statement. I then passed out a half sheet of lined paper and asked students to write a fixed statement they have said, thought to themselves, or heard among their peers. Students crumpled up the paper and tossed it in a recycling bin that I held as I walked around the classroom. I randomly pulled one paper out of the recycling bin, read it out loud, and wrote it on the whiteboard under “fixed”. I then asked students, “How can this fixed statement be transformed into a growth statement?” I called upon volunteers to share their thoughts and noted them on the board under “Growth”. This was repeated seven times.

Day 3: The last lesson involved students to develop an academic goal using a growth mindset approach on the Academic Goal worksheet. See Appendix C. Students were instructed to think of and write an academic goal for their last quarter as seventh graders and how they will achieve that goal using a growth mindset strategy. Once they had thought of their academic goal and their growth mindset strategy, students included an illustration of their goal. I provided a visual for students by showing an example of my personal academic goal, my growth mindset approach and an illustration. Each student received a worksheet and had the rest of the period to complete this. I then collected them, pasted a colored border, laminated them, and posted them

on the classroom wall for students to reflect back to their goal every time they walk in the classroom.

Results

Learning outcome one was that participants would recognize a fixed and growth mindset. I believe this learning outcome was met. After reading, comparing, and analyzing the Mindset Reading Worksheet (Appendix A), participants learned to recognize a fixed mindset and a growth mindset. Their knowledge in recognizing fixed and growth mindsets was reflected on the “Is it Fixed or is it Growth?” worksheet. 16 of the 18 participants were able to define each statement on the worksheet with 100% or 90% accuracy. 1 participant scored 80% and another participant scored 70%. Although one participant scored 70%, this particular participant was still able to grasp sufficient knowledge to recognize the differences between the two mindsets. The average score on the worksheet was 92% , demonstrating having met this outcome. See Table 1 for participant results of “Is it Growth or is it Fixed?”

Learning outcome 2 was that participants would transform a fixed statement into a growth statement. 14 participants wrote a fixed statement. Participants were able to transform 7 fixed statements into 12 growth statements. This shows that participants were elaborating on their peers’ ideas. Because my plan was to only transform three fixed statements and concluded with at least seven transformations by the participants, and although I did not verify that each participant could do the task, they were all engaged and participating in the discussion. This shows that learning outcome 2 was met. See Figure 1 for participants fixed statements transformation.

Learning outcome three was that participants would develop an academic goal using a growth mindset strategy. 14 participants were able to develop an academic goal and apply a growth mindset strategy to their goal. One participant was able to develop an academic goal, but not a growth mindset strategy. One participant did not develop an academic goal, but did develop a growth mindset strategy. One participant did not return his worksheet and one participant was absent. This lesson was done the first day back after spring break. Some participants asked for clarification on how to apply a growth mindset strategy towards their goal since they had a complete week off from school and were having a hard time remembering. After I showed the participants my example and reminded some participants of what fixed and growth mindsets were, they were able to successfully complete the activity. Based on the total number of participants present for the day 3 lesson, 82% successfully developed an academic goal, a growth mindset strategy, and included an illustration. See table 2 for participants Academic Goals and Growth mindset strategies. I can say that learning outcome three was met. Although some participants required extra time to remember the previous discussions about fixed and growth mindset, participants were able to refresh their memory and apply their new learned knowledge.

Discussion

Overall, this project was successful. The participants were able to demonstrate their new knowledge from the lessons by applying key terms within classroom discussion, conversations, and their work. Based on development application, two different mindsets does influence and leads students toward different goals. In this project, after participants learning about growth and fixed mindsets, they were able to develop an academic goal to succeed in their academics for their last quarter as seventh graders. Although participants are currently facing a number of brain

and reasoning changes, teaching them about growth mindset allowed participants to gain insight of how to motivate themselves in the face of academic challenges.

I believe the project was developmentally appropriate for the participants. Visuals, color coding, explanations, and examples were provided to support students' learning. Even though there were a few terms that required further clarification, most of the content was basic material. The time frame of each lesson was also appropriate, especially for this particular group of participants whose attention span may be limited.

My project could have been more inclusive by including non-resource students and other grades from the school. My project excluded those students who were not able to retain the information, I underestimated how hard it is for students with a learning disability to retain material. Lastly, my project excluded participants from a different cultural background who did not grow up with a western orientation. Because the content of a growth mindset is more western oriented, some students who come from a different cultural background may not have heard the ideas discussed in the lesson and was challenging to relate to or to think differently about themselves.

If I had to do this again, I would do the lessons within three consecutive days or every other day within a one week period. Doing the lessons within a one week period would provide consistency and increase the opportunities for participants to retain the new learning. I would have also included a word definition box in the "Mindset Reading Worksheet" to support students understanding of the terminology they had asked clarification for. I would also do a survey before and after of how confident they feel about practicing growth mindset strategies using a likert scale. This survey would be able to measure participants new learning of growth

mindset in a more indepth personal evaluation of themselves. Overall, I am confident that participants did learn to define growth mindset and can apply this new knowledge to motivate themselves through their academic journey.

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Table 1

Participant results of “Is it Growth or is it Fixed?” worksheet

# of students	Percentage correct
8	100%
8	90%
1	80%
1	70%
Average Score	92%

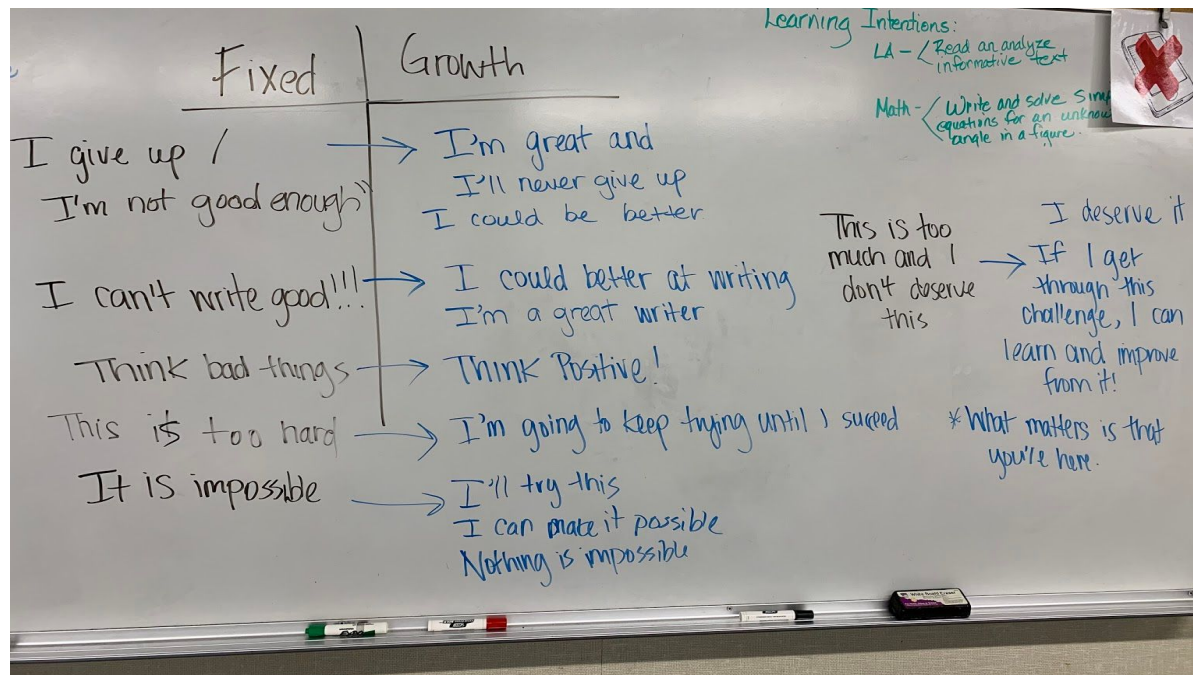
Table 2

Participants Academic Goals and Growth Mindset Strategies

	Academic Goal	Growth Mindset Strategy
	“Do Good”	“Self confidence”
	“To get all A’s”	“Work hard”
	“Getting A b in science”	“Work harder”
	“To make honor roll”	“I am going to put my mind to it and putting in the work”
	“Become a zooligust/ Landscaper/ Anamator/ mini pony/cat person”	“Keeping my faith in starclan and remembering it will All Be worth it in the end!”
	“Get better at L.A.” (Language Arts)	“Putting more effort In my work portfolio’s”
Total completed	14 Academic Goals	14 Growth Mindset Strategies
	Participant developed Academic Goal	Participant did not develop Growth Mindset Strategy
	Participant did not develop Academic Goal	Participant applied Growth Mindset Strategy
	Participant did not return worksheet	Participant did not return worksheet
	Participant was absent	Participant was absent
Average Score of completion	82%	

Figure 1

Participants' fixed statement transformations



Appendices

Mindset Reading Worksheet

Is it Fixed or Is it Growth?

Academic Goal Worksheet

Appendix A

What is a growth mindset, and why does it matter?

Students with a **fixed mindset** believe that their intelligence and talent are innate traits that don't change. For example, they might say "I just can't learn math." These students typically worry about not looking smart, get upset by mistakes, and give up sooner on tough tasks.

Students with a **growth mindset** believe that ability can change as a result of effort, perseverance, and practice. You might hear them say, "Math is hard, but if I keep trying, I can get better at it."

Students with a growth mindset see mistakes as ways to learn, embrace challenges, and persist in the face of setbacks. High-performing students and low-performing students may have either mindset

Students with a growth mindset:

- Are more motivated and engaged, even when work is challenging
- Are more likely to review or revise their work
- Score better on math and verbal standardized tests
- Fail fewer classes and have higher GPAs
- Are more likely to persist in high school and college

Two Mindsets

Category	Fixed Mindset (Intelligence is static)	Growth Mindset (Intelligence can be developed)
CHALLENGES	...avoid challenges	...embrace challenges
OBSTACLES	...give up easily	...persist in the face of setbacks
EFFORT	...don't effort on failures or weaknesses	...are often on the path to mastery
CRITICISM	...ignore work or engaged in feedback	...learn from criticism
SUCCESS OF OTHERS	...feel threatened by the success of others	...find lessons and inspiration in the success of others

As a result, they may plateau early and achieve less than their full potential.

As a result, they reach even higher.

Inspired by Carol Dweck's research by Carol Dweck <http://www.wednet.edu/dongwhatworks>

Appendix B

Is it Fixed or is it Growth?

“I’ll never get better at it.”



“I know what to do to get better!”



“Failing means I’m not good enough.”



“This subject is too hard, why try?”



“I’m either good at it or I’m not!”



“I’m not smart”



“My effort and attitude determine everything!”



“I want to challenge myself.”



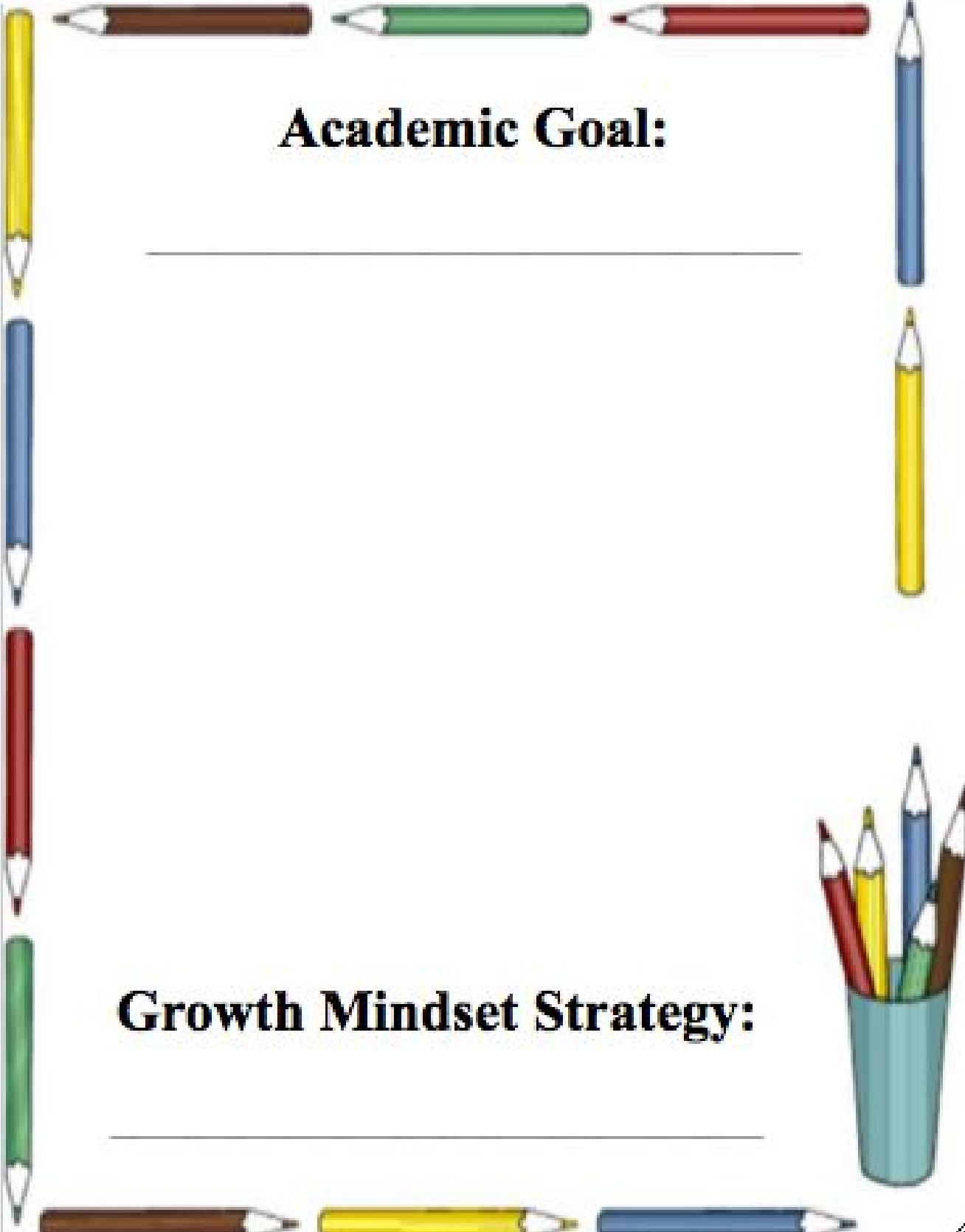
“When I’m frustrated, I give up.”



“I can learn anything I want to.”



Appendix C



Academic Goal:

Growth Mindset Strategy:

